National Energy Technology Laboratory



Solid State Lighting Program - "Organization"

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November 13, 2003





Government – SSL Partnership Cooperative R&D Program for SSL

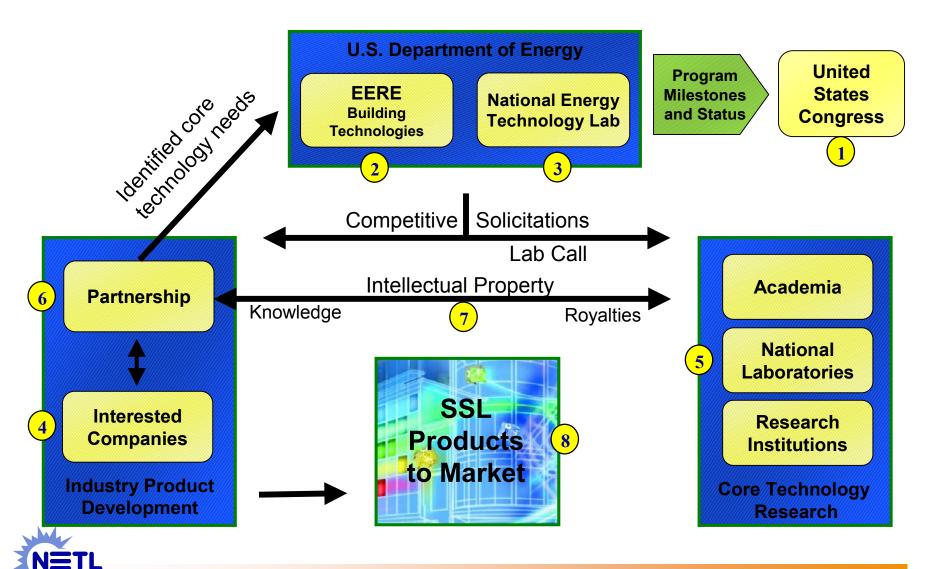
- Emphasize Competition
- Cost (and Risk) Sharing
- Partners Involved in Planning and Funding
- Targeted Research for Focused Need
- Innovative IP Provisions
- Open Information and Process
- Success determined by milestones met and ultimately energy efficient, long-life and costcompetitive products developed

Current Structure...

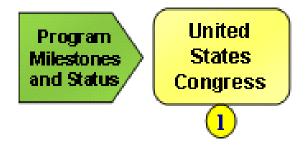
• Disclaimer: The slides that follow are current thinking, November 13, 2003. The DOE values your input to the structure of this innovative government-private sector partnership and encourages you to communicate your thoughts (at the appropriate times, of course). Following this presentation is the "Panel Discussion: Question and Answer Period".



Structure of SSL Operational Plan



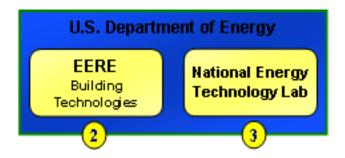
United States Congress



- Issues Appropriations and Language that "authorizes" the DOE to perform research and development in programs
 - May issue appropriations
 - May issue language
 - Language may provide detailed guidelines on how to implement the program
- Requires reporting on program success
 - Milestones
 - Status



Building Technologies and NETL



EERE Building Technologies

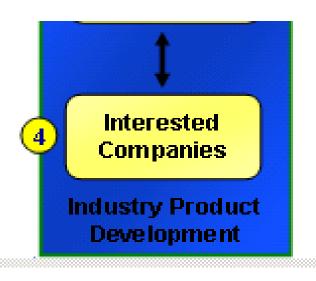
- Serve as Program Lead for activities
- Performs strategic planning
- Performs program definition
- Interfaces with Congress

National Energy Technology Laboratory

- Develops and issues solicitations
- Performs project management of selected projects
- Reports on project status to HQ



Interested Companies



- Competitive solicitation to industry
- Needs developed by DOE from results of this meeting
- Applications will require cost sharing
- Applications will require plan/SOW through development of a marketable product



Core Technology Program

- Solicitations
 - to National Laboratories ("lab call")
 - to academia and research institutions
- Earlier stages of development
- May or may not require cost sharing
- Needs developed by DOE with input from Partnership group
- Applications will be for barrier issues that may apply to multiple technical areas, i.e. product development not required

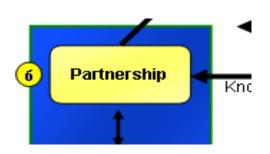




SSL Partnership

WHY?

- Provide input to and prioritization of the Core Technology Needs
- Provide technical reviews of Core Technology projects
- Help organize and sponsor yearly SSL conference/workshop
- Congress is requesting (officially or unofficially) more industry involvement





SSL Partnership

Selection Priorities:

- 1. Guarantee all interested, qualified¹ organizations have fair and equal access to participate in the group
- 6 Partnership Kno
- 2. Maximize the group's selfgoverning while assuring priority 1

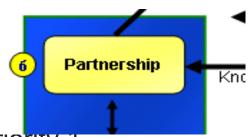
Note 1) It is intended that this group will include organizations that produce SSL products



SSL Partnership

Two Possible Methods of Selection

1. Competitive solicitation to select the "Partnership Group"

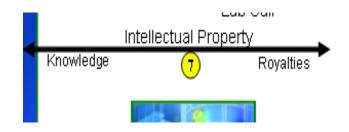


- Would maximize priority 2 but might limit priority 1
- 2. DOE issues a Request for Qualifications to meet certain, DOE defined criteria, i.e. related to production of products.
 - Would maximize priority 1 but might limit priority 2
- The chosen method would likely incorporate the positive aspects of both methods to assure both priorities are met.

Reminder: Priority 1 is related to "fair and equal access" and priority 2 is "self-governing"



Intellectual Property



- DOE plans to request an exceptional circumstances determination to Bayh-Dole (Patent and Trademark Law Amendments Act)
- Purpose is to speed the development of improved solid state lighting products
- It is envisioned that:
 - Core developers have easy access to a group of interested manufacturers
 - Non-exclusive licensing (in SSL area within first year after patents issued) will create competition to market products faster



SSL Products to Market

SSL Program Goal...

"By 2015, develop advanced solid state lighting technologies that compared to conventional lighting technologies, are much more energy efficient, longer lasting, and cost-competitive by targeting a product system efficiency of 50 percent with lighting that accurately reproduces sunlight spectrum"





SSL Operational Plan Process

SSL Program Kickoff Meeting

- Introduce program
- Project the SSL future
- Revise SSL research agenda

Competitive Solicitations Issued

- SSL Partnership solicitation
- Product development for industry
- Core technology for academia, national labs and research institutions
- National lab call

Projects Selected

- Industry R&D projects selected by DOE
- Core technology projects selected by DOE and industry

SSL Program Yearly Review

- All projects present results
- Industry peer reviews core technology projects
- Update roadmaps and needs



Solicitation Schedule

2Q FY'04	Lab Call and Solicitation for Applied Research
2Q FY'04	Industry <i>et al.</i> , Solicitation for Product Development
2Q FY'04	SSL Partnership Solicitation

